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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,826	01/21/2004	Stephen J. Todd	E0295.70200US00	4078

23628 7590 03/13/2006

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EXAMINER

DARE, RYAN A

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/761,826	Applicant(s) TODD ET AL.	
	Examiner Ryan Dare	Art Unit 2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) 20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 20 is objected to because of the following informalities: Claim 20 is an independent claim that is supposed to depend from a host computer parent claim. As written, claim 20 depends from claim 5, which is a method claim. The Examiner believes Claim 20 was intended to depend from claim 15, and has been treated as such for the remainder of this Office Action.
2. Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 21 claims the host computer of claim 15, in combination with the at least one storage system. The at least one storage system is already declared in combination with the host computer in the first two lines of claim 15.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by

Hochberg et al., US PG Pub 2005/0055518.

3. With respect to claim 1, Hochberg et al. teach **a method of processing data in a computer system comprising at least one host and at least one storage system, the method comprising acts of:**

(A) sending to the at least one storage system, from the at least one host, a request to store a unit of data, the request including the retention period for the unit of data, in fig. 4, step 100. Fig. 3 shows the retention period that accompanies the data. In fig. 1, the host is one of the Clients 6a-c, and the storage system is Archive Server 2 and Archival Storage 4;

(B) after expiration of at least some of the retention period, determining if a specified event has occurred, in par. 40. and fig. 5, step 120;

(C) when it is determined in the act (B) that the specified event has not occurred, extending the retention period for the unit of data, in pars. 40-41; and

(D) repeating the acts (B) and (C) until it is determined in the act (B) that the specified event has occurred, in pars. 40-41 and fig. 5, step 122.

The archive program of Hochberg et al. continuously polls for an event signal to be received from the client. Therefore this invention constantly extends the retention period until the event occurs. Applicant's invention operates in the same way. There is no way for the retention period to expire until the event occurs, since it is continuously updated before the retention period expires.

4. With respect to claim 3, Hochberg et al. teach **the method of claim 1, wherein the method is for retaining the unit of data for a specified period after the occurrence of an event, and wherein the method further comprises an act of:**

(E) when it is determined in the act (B) that the specified event has occurred, extending the retention period for the unit of data for a length of time associated with the specified period after the occurrence of the event, in fig. 5, steps 128 and 130.

5. With respect to claim 3, Hochberg et al. teach **the method of claim 1, wherein the method is for retaining the unit of data for a specified period after the occurrence of an event, and wherein the method further comprises an act of:**

(E) when it is determined in the act (B) that the specified event has occurred, extending the retention period for the unit of data so that the retention period expires the specified period after the occurrence of the event, in fig. 5, steps 128 and 130.

6. With respect to claim 4, Hochberg et al. teach **the method of claim 2, wherein the act (C) further comprises an act of:**

(C1) extending the retention period for the unit of data for an extended period that is less than or equal to the specified period for the unit of data to be retained after the occurrence of the event, because the retention period is only extended long enough until the event signal is polled again.

7. With respect to claim 5, Hochberg et al. teach **the method of claim 4, wherein the act (D) comprises an act of, each time the act (C) is performed, extending the**

retention period by a same length of time. Because the archive program is continually waiting for the event signals, it is logical that the archive program is polling it at the same interval, such as in the loop of a program.

8. With respect to claim 6, Hochberg et al. teach **the method of claim 1, wherein the at least one storage system stores at least two different types of units of data including a blob of data and a content descriptor file (CDF), each blob having at least one corresponding CDF that includes metadata relating to the blob, wherein a retention period of a blob is the retention period of its corresponding at least one CDF, wherein the unit of data is a blob, wherein the act (A) comprises establishing the retention period in a first CDF that corresponds to the blob, and wherein the act (C) further comprises:**

creating a second CDF that corresponds to the blob and has a retention period that expires after the retention period of the first CDF, in fig. 7 and par. 45.

Referring to figs. 1-3, Hochberg refers to the unit, or "blob" of data as an object. Hochberg refers to the CDFs associated with the blob as Object Entries and Expiration Entries that are stored in the Archive Database 14. It can be seen from fig. 3, that the Expiration entry contains metadata with a retention period. Hochberg teaches the limitation of creating a second CDF, because modifying the retention period of an object is the same as creating a new CDF with a different retention period.

9. With respect to claim 7, Hochberg et al. teach **a method of ensuring that a unit of data, stored on a computer system, is retained until a specified period after the occurrence of an event, the computer system comprising at least one host and at**

Art Unit: 2186

least one storage system that stores the unit of data, the method comprising acts of:

(A) establishing an initial retention period for the unit of data, wherein the initial retention period is less than or equal to the specified period, in fig. 3,

Retention Period 58;

(B) after the expiration of at least some of the initial retention period, determining whether the specified event has occurred, in par. 40. and fig. 5, step 120;

(C) when it is determined in the act (B) that the specified event has not occurred, performing acts of:

(C1) extending the retention period for the unit of data for an extended period that is less than or equal to the specified period, in pars. 40-41; and

(C2) after the expiration of at least some of the extended retention period, determining whether the specified event has occurred and when the specified event has not occurred, returning to the act (C1), and when the specified event has occurred, proceeding to the act (D), in pars. 40-41; and

(D) when it is determined in either of the acts (B) or (C2) that the specified event has occurred at a time, extending the retention period so that the retention period expires the specified period after the time at which the event occurred, in pars. 40-41 and fig. 5, step 122.

The archive program of Hochberg et al. continuously polls for an event signal to be received from the client. Therefore this invention constantly extends the retention period until the event occurs. Applicant's invention operates in the same way. There is no way for the retention period to expire until the event occurs, since it is continuously updated before the retention period expires.

10. With respect to claims 8-13, Applicant claims a computer readable medium encoded with instructions that perform the method of claims 1-6, and is therefore rejected using similar logic.

11. With respect to claim 14, Applicant claims a computer readable medium encoded with instructions that perform the method of claim 7, and is therefore rejected using similar logic.

12. With respect to claims 15-20, Applicant claims a host computer for use in a computer system that includes the host computer and at least one storage system, the host computer comprising means for performing the method of claims 1-6, and is therefore rejected using similar logic.

13. With respect to claim 21, Hochberg et al. teach the host computer of claim 15, in combination with the at least one storage system, in fig. 1, where the storage system is Archival Storage 4.

Conclusion

14. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to

Art Unit: 2186

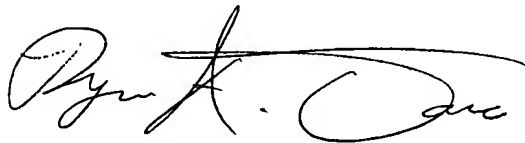
consider these references fully when responding to this action. The documents cited therein teach similar event driven data retention systems.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Dare whose telephone number is (571)272-4069.

The examiner can normally be reached on Mon-Fri 9:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571)272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan A. Dare
February 24, 2006



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